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EXAMINER

RAMAKRISHNAIAH, MELUR

ART UNIT PAPER NUMBER

2643

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/955,817

Applicant(s)

IYER, GOPAL N.

Examiner

Melur Ramakrishnaiah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7-2-2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 09/955,624. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the present application is an obvious variation of claim 1 of Application No. 09/955,624.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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2. Claims 1-3, 5, 11, 13-15, are rejected under 35 U.S.C 102(b) as being anticipated by Grenning et al. (US PAT: 5,706,333, hereinafter Grenning).

Regarding claim 1, Grenning discloses a computer-implemented method of troubleshooting a problem associated with a cellular network site, comprising the steps of: receiving a symptom input describing the symptoms of the problem, determining whether at least one of plurality of rules is invoked by the symptom input, wherein plurality of rules comprise a plurality of if-then statements (see table-I), and if so, then outputting a potential solution to the problem wherein the potential problem solution is determined by the invoked rule (col. 16, line 23 – col. 17, line 50).

Regarding claims 2-3, 5, Grenning further teaches the following: plurality of if-then statements comprises plurality of if portions and plurality of then portions (see table-I), and wherein the step of determining whether at least one of plurality of rules is invoked by the symptom input comprises whether the symptom input matches one of the plurality of if portions, and if so, then determining that the rule associated with the matched if portion is invoked, where in the step of outputting a potential solution to the problem comprises outputting the then portion of the invoked rule step of receiving a facts input describing relevant facts regarding the cellular network and wherein the step of determining whether at least one of plurality of rules is invoked by the symptom input further comprises determining whether at least one of the plurality of rules is invoked by the symptom input and the facts input (col. 16, line 23 – col. 17, line 50).

Regarding claim 11, Grenning discloses an expert system for trouble shooting a problem in a cellular network site, the expert system comprising: a user interface for

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transmitting and receiving data to the expert system (col. 6 lines 55-60), an inference engine in (126, FIG. 1) connected to the user interface, wherein user inference engine receives data from the user interface and transmits data to the user interface, a knowledge database (reads on 132, col. 7 lines 25-34) connected to the inference engine, wherein the knowledge database comprises a plurality of rules (as shown in table table-I) used to provide potential solutions to the problem, and a domain database (reads on 130, fig. 1), wherein the domain database comprises plurality of facts regarding the cellular network site (col. 7 lines 35-43, col. 16, line 23 – col. 17, line 50).

Regarding claim 13-15, Grenning teaches the following: plurality of rules comprises a plurality of if-then statements (see table-I) wherein if portion corresponds to the problem and the then portion corresponds to a potential solution (col. 16 lines 37-43), knowledge database is populated with a plurality of rules using a knowledge acquisition facility (KAF, not shown) wherein (KAF) comprises software application for interviewing cellular network site engineers, wherein KAF formulates plurality of if-then statements from the interviews with the cellular network site engineers wherein the plurality of if-then statements are stored as the plurality of rules in the knowledge database (col. 16, line 23 – col. 17, line 50).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 6-10, 12, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grenning in view of Moore et al. (US PAT: 4,697,243, hereinafter Moore).

Regarding claim 4, Grenning does not explicitly teach the following: outputting potential solution to the problem comprises displaying the potential solution in a user interface of a computing device.

However, Moore discloses methods of servicing an elevator system which teaches the following: outputting potential solution to the problem comprises displaying the potential solution in a user interface of a computing device (col. 6 lines 60-62).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Grenning's system to provide for the following: outputting potential solution to the problem comprises displaying the potential solution in a user interface of a computing device as this arrangement would facilitate the user to easily grasp the solution to the problem which is displayed on a display as shown by Moore.

Grenning differs from claims 6-10, 12 in that he does not teach the following: if the rule is not invoked, then adding the symptom input to a provisional rule list, receiving a potential solution input, and adding the symptoms input and potential solution input as one of plurality of rules stored in a knowledge database, computer executable instructions for performing steps of claim 7, receiving an indication input indicating whether the potential solution was successful, if the indication input indicates that the potential solution was successful, then adding the symptom input to the provisional list, receiving a potential solution input and potential solution input as one of plurality of rules

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stored in a knowledge database, provisional rules list comprising problem rules that have not resulted in any potential solutions.

However, Moore teaches the following: if the rule is not invoked, then adding the symptom input to a provisional rule list, receiving a potential solution input, and adding the symptoms input and potential solution input as one of plurality of rules stored in a knowledge database, computer executable instructions for performing steps of claim 7, receiving an indication input indicating whether the potential solution was successful, if the indication input indicates that the potential solution was successful, then adding the symptom input to the provisional list, receiving a potential solution input and potential solution input as one of plurality of rules stored in a knowledge database, provisional rules list comprising problem rules that have not resulted in any potential solutions (col. 3 lines 11-27).

Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Grenning's system to provide for the following: the adding the symptom input to a provisional rule list, receiving a potential solution input, and adding the symptoms input and potential solution input as one of plurality of rules stored in a knowledge database, computer executable instructions for performing steps of claim 7, receiving an indication input indicating whether the potential solution was successful, if the indication input indicates that the potential solution was successful, then adding the symptom input to the provisional list, receiving a potential solution input and potential solution input as one of plurality of rules stored in a knowledge database, provisional rules list comprising problem rules that have not resulted in any potential

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solutions as this arrangement would facilitate to add new rules to the domain dependent rule base, thus allowing the expert system to be constantly improved and more reliable as taught by Moore.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Melur Ramakrishnaiah  
Primary Examiner  
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